



WA9901 - RFID MODULE UHF LINEAR (NA) ENDCAP H/W INSTALLATION SHEET



Important: All Approval and safety information is outlined in the 'WORKABOUTPRO4 Regulatory & Warranty Guide – part number 8000296 provided with each WORKABOUTPRO4.

Warning: *The WORKABOUTPRO4 with the RFID option must not be held closer than 20 cm from the rest of the body. This product must not be used in a holster or on a belt-clip. RFID cannot be used in co-transmission with WAN module.*



1. Product Description

Easily installable expansion modules for the WORKABOUT PRO4 allow you to customise this hand-held to meet your specific mobile computing requirements. This chapter outlines how to install the NA UHF Linear RFID Module.

The RFID MODULE UHF LINEAR (WA9901) kit is based on the Sailfish UHF module from MOTOROLA Inc. (Model: 21-121559). It is made of 4 parts:

- ASSY MODULE UHF WAP4 NA
- ASSY ANTENNA LINEAR NA WAP4
- INSTRUCTION SHEET WAP4 UHF LINEAR NA
- LABELS FCC WAP4 UHF LINEAR VARIANT

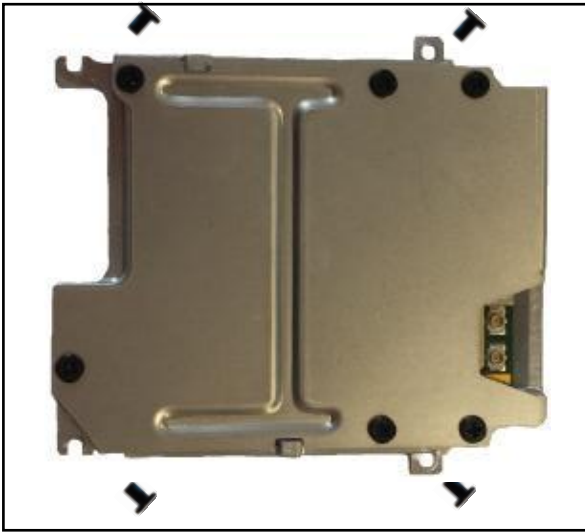


Figure 1-1 ASSY MODULE UHF WAP4 NA



Figure 1-2 ASSY ANTENNA LINEAR NA WAP4



Figure 1-3 INSTRUCTION SHEET WAP4 UHF LINEAR NA

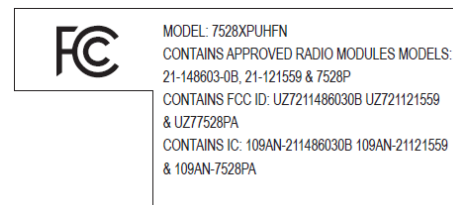
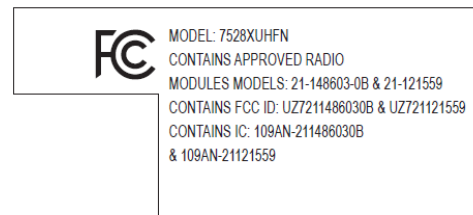


Figure 1-4 LABELS FCC WAP4 UHF LINEAR VARIANT

2. Product Installation

Before installing a module in the WORKABOUT PRO4, all power sources must be turned off.

- Remove the battery. If your unit is using AC power, disconnect it.



Figure 2-1 Battery location

With the power shut down, you can now install the NA RFID Module UHF Linear.

- Remove the existing endcap and pod or backplate

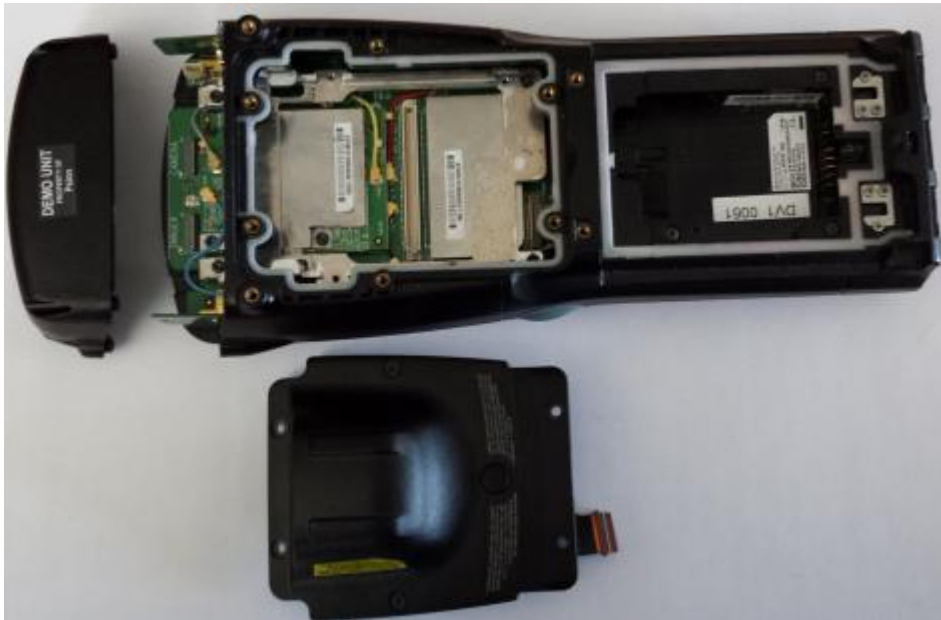


Figure 2-2 WAP4 Disassembled

- Slide the RFID Module inside the back opening

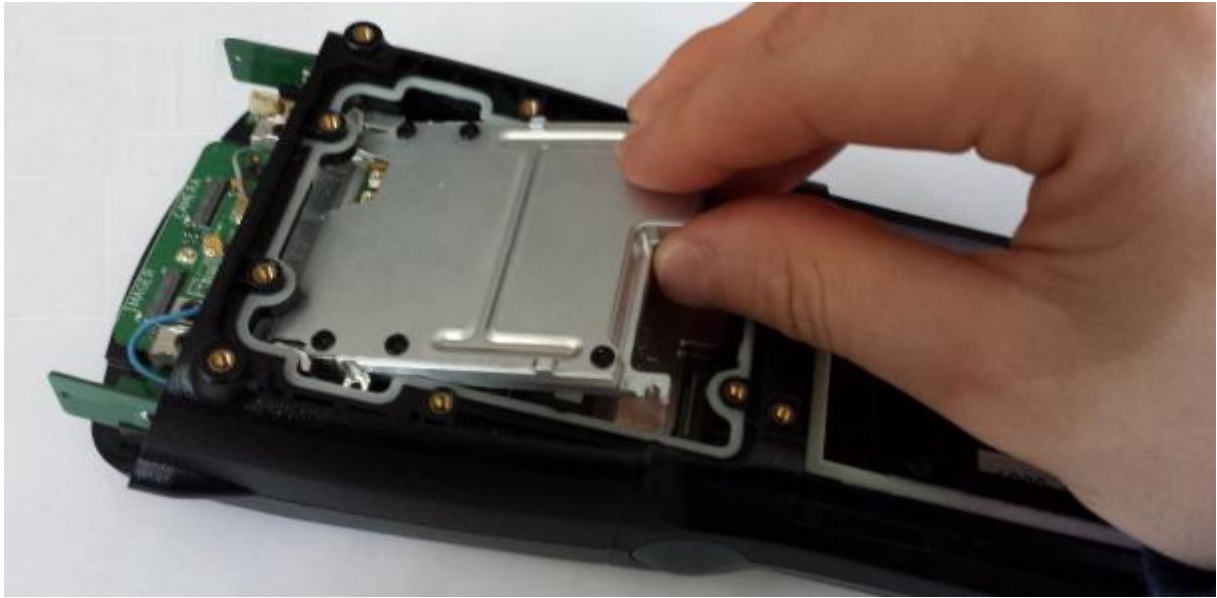


Figure 2-3 *RFID Module Assembly*

- Drive the 4 screws that fix the RFID module on WAP4 frame

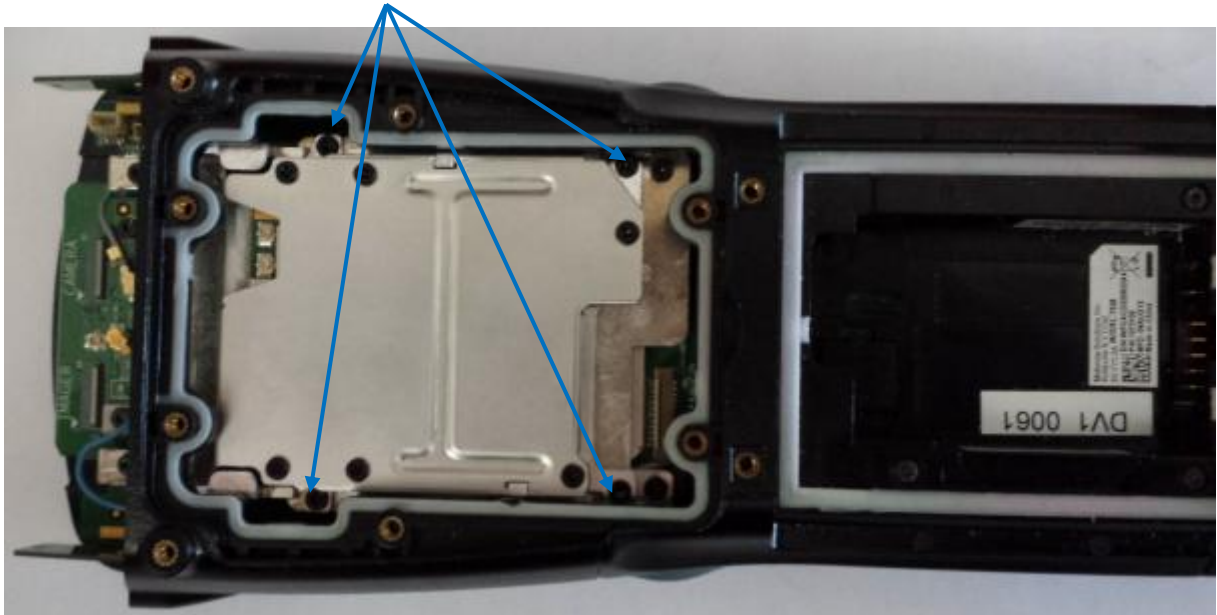


Figure 2-4 *RFID Module Assembly*

Place the antenna in the right slot:

- For WAP4 with WLAN only (7528XUHFE), antenna must be placed in the bottom slot



Figure 2-5 Antenna position for WLAN only WAP4 version

- For WAP4 with WWAN (7528XPUHFN), antenna must be placed in the middle slot

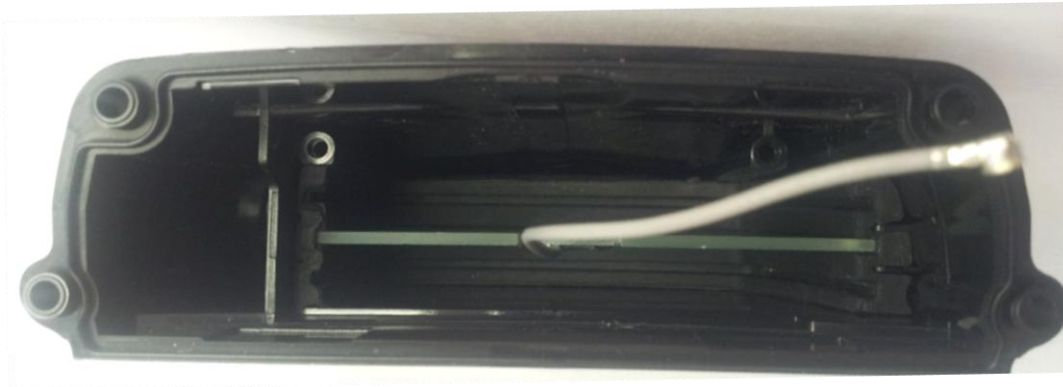


Figure 2-6 Antenna position for WWAN WAP4 version



Antenna should be correctly inserted in the rubber

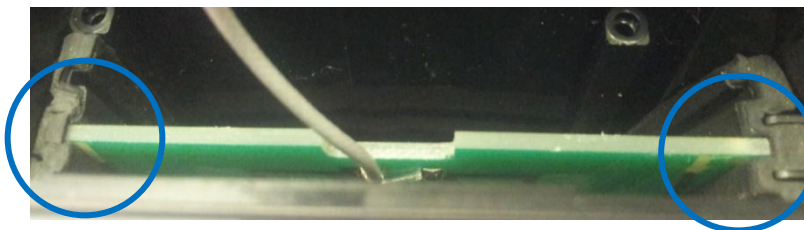


Figure 2-7 Right insertion (antenna is pushed totally in the rubber)

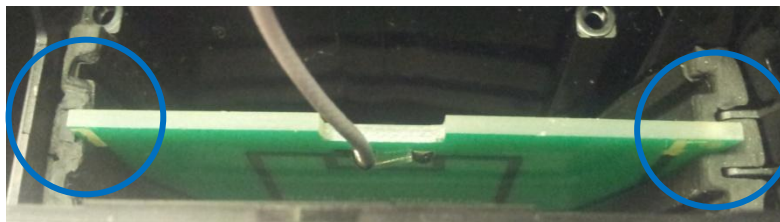


Figure 2-8 Wrong insertion (antenna comes out of the rubber)

- Drive the 2 self-tapping screws to fix the antenna stopper

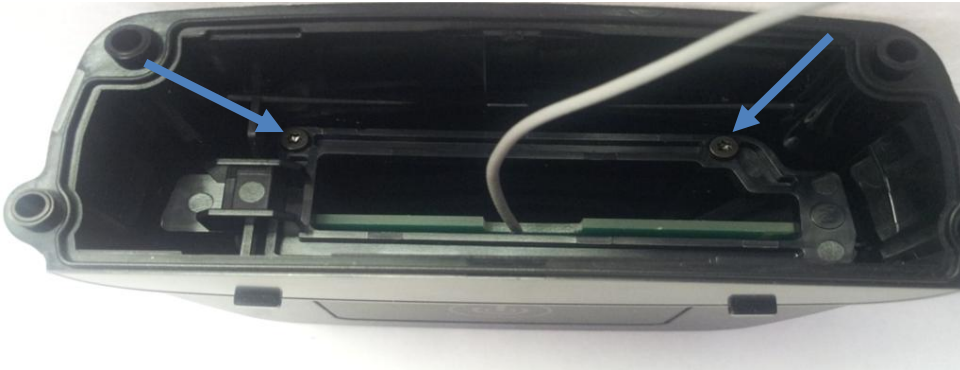


Figure 2-9 Antenna stopper assembly

- Plug the U.FL antenna connector to the Sailfish module.



Warning: Make sure you use the proper RF port (right side of the Sailfish)

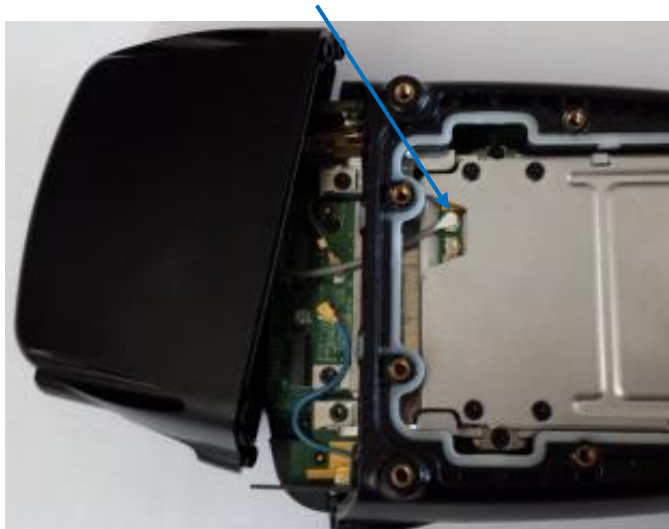


Figure 2-5 Linear antenna Assembly

- Reassemble the pod or backplate and the endcap



Figure 2-6 Final Assembly

IF the model number of WorkAbout Pro4 is 7528XUHFA (WWAN version) put this label:

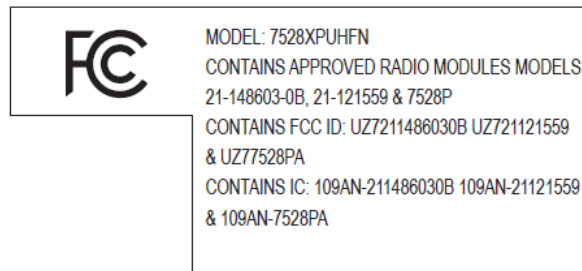


Figure 2-7 FCC/IC Label for WWAN variant

IF the model number of WorkAbout Pro4 is 7528XPUHFA (WLAN only) put this label type:

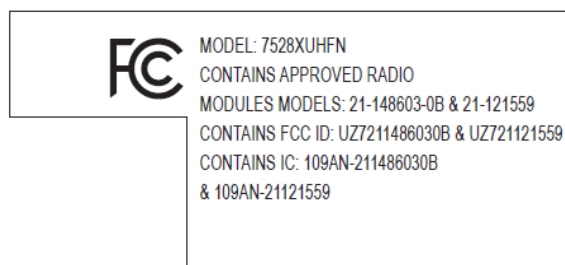


Figure 2-8 FCC/IC Label for WLAN variant

Stick the label in the location following depends on WorkAbout Pro4 variant:



Figure 2-9 WorkAbout Pro4 Long Alphanumeric Keyboard



Figure 2-10 WorkAbout Pro4 Short Numeric Keyboard

3. Software installation:



To get current driver for WorkAbout Pro4, go to the website at:

http://community.pSION.com/downloads/developer_sdkhdk/m/rfid_sdk/

- Copy and install the latest CAB file named “WAP4_WM_RFID_UHF”.

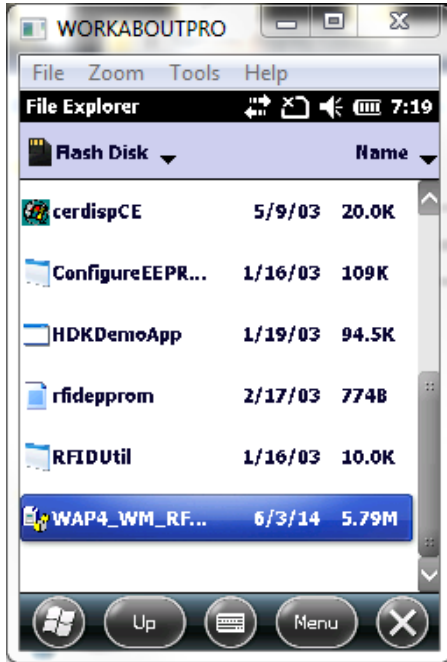


Figure 3-1 Driver CAB file

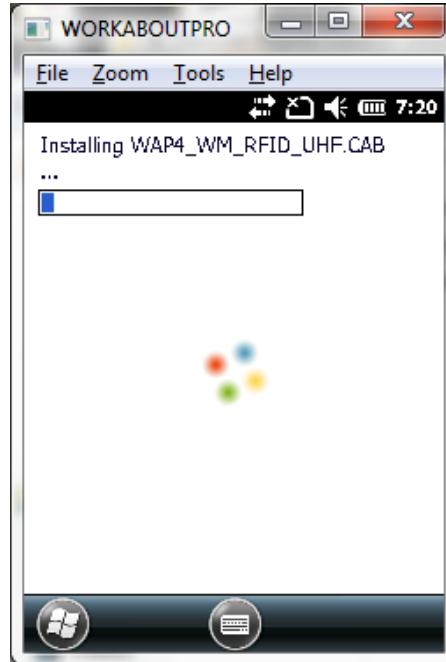


Figure 3-2 Driver sucFCC/ICsfully Installed

- After installation, select **RFID Demo** in the **Start** menu to start the RFID sample application.



Figure 3-3 RFID demo Icon

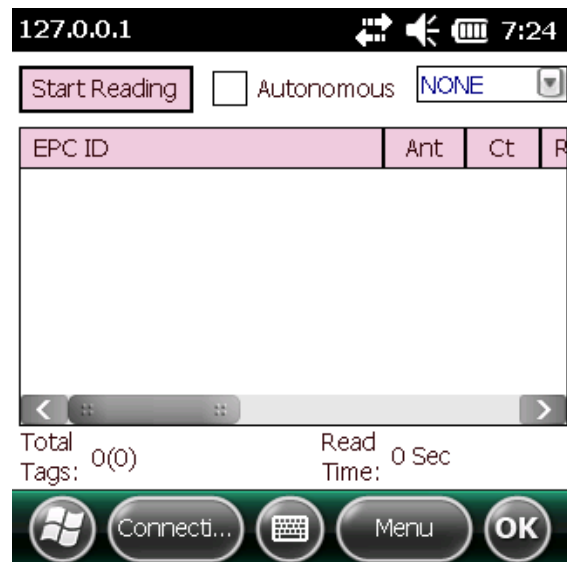


Figure 3-4 RFID Sample Application Window

- To read the ID of TAG, press the **Start Reading** button ID Button. Put the TAG in front of the antenna. Tap Stop Reading to terminate tag reading.



Figure 3-5 ID Tag Reading

For detailed instructions on how to use the RFID demo application, please visit <http://www.motorolasolutions.com> and download '[RFID Demo Applications User Guide \(P/N 72E-160038-01\)](#)'

4. Reading area:

This area depends on the TAG type, TAG packaging, Tag position and environment (metallic or not).



Figure 4-1 Reading area

<p style="text-align: center;">RFID MODULE UHF LINEAR NA ENDCAP RFID Regulatory information</p>
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IMPORTANT NOTE FOR NORTH AMERICA:

The RFID must not be used whilst the host WORKABOUTPRO4 is being powered by the ac/dc adaptor.

FCC Information to Users:

Radiation Exposure Compliance

This product complies with the FCC RF exposure limits for an uncontrolled environment. For continued compliance, the product must not be held closer than 20 cm from the rest of the body. This product must not be used in a holster or on a belt-clip.

The host WORKABOUTPRO4 is configured to prevent WAN and RFID to be in co-transmission. The user cannot activate both at the same time.

Federal Communication Commission Interference Statement.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Emissions Information for Canada:

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is Subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement